

Mike McGinn, Mayor

Seattle City Light

Jorge Carrasco, Superintendent

March 17, 2011

United States General Services Administration (GSA) Federal Center South B1202 – Attn: Dawn Ashton 4735 E. Marginal Way S. Seattle, WA., 98134

Dear Dawn Ashton:

Subject:

Service Construction Letter for: Federal Center South B1202,

Service Request, SR# 58320. Work Order, WO#19840

Seattle City Light has reviewed your request for electrical service. This Service Construction Letter provides Seattle City Light's cost estimate, a description of the Seattle City Light scope of work for your project, general requirements, customer construction requirements, a construction requirements drawing, and an acceptance form that must be signed and returned.

This letter is the only copy you will receive. Please disperse copies as necessary to your consultant, contractor, or other parties involved with your electric service installation.

Please review Attachment A entitled <u>Seattle City Light Cost Estimate</u>. This provides the cost and terms of the Seattle City Light work for your project.

Please review Attachment B entitled <u>Seattle City Light Scope of Work</u>. This attachment outlines the electrical service installation work Seattle City Light will need to perform.

Please review Attachment C entitled <u>General Customer Requirements</u>. Not every general requirement may be applicable to your project. If you have any questions, please contact your electric service representative.

Please review Attachment D entitled <u>Customer Construction Requirements</u>. Completion of these requirements is the customer's responsibility in order for Seattle City Light to complete the necessary electric service installation work. Also take note of the <u>Construction Requirements Drawing</u> and relevant Seattle City Light <u>Construction Guidelines</u> and/or <u>Material Standards</u>.



[Recipient Name] March 17, 2011 Page 2

Please sign and return Attachment E entitled <u>Service Construction Acceptance Form</u> to indicate your approval of this Service Construction Letter, including all attachments. We will not proceed with design and scheduling our work on the project until after we receive the signed form.

Sincerely,

Ken Houlder

Electric Service Engineer

Poreldes

W) 206-233-0045, C) 206-949-5686

cc: Chief Electrical Inspector

Seattle Department of Planning and Development

bcc: Ken Houlder Electric Service Engineer

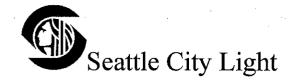
Lin-fa Chi Electric Engineer

Margy Jones Mgr of Electric Service Engineering

Christine Knowlton SCL UG Civil Inspector Ed Hill SCL Electrical Inspector

Pat Gallagher/Allan Belvin Technical Metering

Kelly Enright Director of Customer Service
Bob Klug Account Executive Unit



Attachment A: Seattle City Light Cost Estimate

Service Address:

United States General Services Administration (GSA)

Federal Center South B1202 4735 E Marginal Way S Seattle, WA. 98134

SR #: 58320, WO#19840

Re: Service Construction Letter Dated: March 17th 2011.

The following is a summary of Seattle City Light's charges.

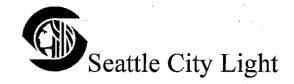
Time & Materials Charge:

Pay Seattle City Light an installation charge for the actual time and materials cost for the Seattle City Light work itemized in Attachment B. The estimated cost for Seattle City Light to complete the installation work is \$101,000.00. Twenty percent (20%) or \$20,200.00 of the estimated cost must be paid before Seattle City Light's design engineers and/or installation crews will begin work. The balance, \$80,800.00 must be paid in full before the service can be approved for connection. A final billing will be rendered to adjust for the actual time and materials after the installation is complete. This final billing will be provided 60 days after energizing the service. If the actual cost is plus or minus 10 percent of the estimate, the Seattle City Light engineer will substantiate the differences between the estimated and actual service costs.

Seattle City Light's electrical design and all charges described in this letter are in effect for 120 calendar days from the date of this letter. Seattle City Light's electrical design and the charges are subject to review after the 120-day period has expired even if the customer has made a full or partial payment. Any change in the design of the customer's project will subject Seattle City Light's electrical design and cost estimate to further review.

Note: The 5000KVA power transformer leasing /rental fee is not included in this cost estimate.

2/14 3/17/11



Attachment B: Seattle City Light Scope of Work

Service Address:

United States General Service Administration (GSA)

Federal Center South B1202 4735 E Marginal Way S Seattle, WA. 98134

SR #58320, WO# 19840

Re: Service Construction Letter Dated: March17th, 2011

The following is a summary of Seattle City Light's scope of work.

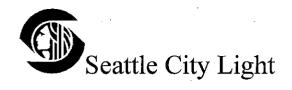
Power Service Summary:

- The electric service shall be 26,400Y/15,240 volts, 3-phase, 4-wire.
- The fault current will be no more than 13,500 amps at the terminal lugs of the customer's switchgear.
- The legal service termination point shall be at the terminal lugs in the meter compartment of the customer's switchgear.

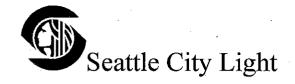
For an Seattle City Light-installed service, Seattle City Light will:

- 1. Provide and install high-voltage cables from the customer's installed vault(712-LA) to the customer's switchgear.
- 2. Provide and install 600A primary connectors in the new vault.
- 3. Make all high-voltage electrical connections in the new vault and in the meter compartment of the customer's switchgear.
- 4. Pull out existing high-voltage cables from TP-182 to existing 7500KVA power transformer for the customer to intercept existing 2-5" conduits and extend to the new vault. After the customer completes the civil work, SCL will pull in high-voltage cables from TP-182 to the new vault and from the new vault to the existing 7500KVA power transformer.
- 5. Make all high-voltage electrical connections in the new vault and at the TP-182 and at the 7500KVA power transformer primary side.
- 6. Install metering.
- 7. Deliver the distribution power transformer(1-5000KVA) to the customer's site.
- 8. Remove existing service(s) after the new service is energized.

Note: Over time work is required for items 4-5 mentioned above per customer request, Regular work will be used for items 1-3 and 6-8.



Seattle City Light will perform the electrical service installation work unless you request that a licensed, private contractor of your choice does the work with Seattle City Light approving the plans. If a private contractor is approved to do the installation, Seattle City Light must perform and charge for engineering work, certain inspections, meter installations, and final connections. A separate estimate of these costs is available upon request.



Attachment C: General Customer Requirements

Service Address:

United States General Services Administration (GSA)

Federal Center South B1202 4735 E. Marginal Way S. Seattle, WA. 98134

SR #: 58320, WO#19840

Re: Service Construction Letter Dated: March 17, 2011

Safety:

• Locating underground utilities:

Before digging, please contact the Utilities Underground Location Center ("One-Call") at 1-800-424-5555 at least two business days in advance to locate and mark underground utilities, per state law (RCW 19.122).

• Excavating near Seattle City Light facilities:

All excavations adjacent to Seattle City Light poles or other facilities (vaults, handholes, etc.) shall comply with <u>WAC 296-155</u>, <u>Part N, Excavation, Trenching and Shoring.</u> Pole protection/supporting systems used while excavating shall comply with <u>WAC 296-155-655</u>, <u>General Protection Requirements, item (9)</u> and shall not affect the structural integrity of poles while the systems are in place or after the systems have been removed.

• High-voltage working clearance:

State law requires all construction workers, their tools, machinery, temporary structures, equipment and materials to maintain a minimum 10-feet clearance from many types of power lines (WAC 296-24-960). Seattle City Light transmission lines require even greater clearance. If this project requires work in proximity to any energized lines, notify us in advance so that we can de-energize and ground the lines, or relocate the lines temporarily. This work will be done at the customer's expense. The cost must be paid in advance of any work.

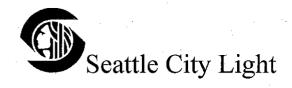
• Permanent structure clearances from high-voltage lines:

See <u>Seattle DPD Client Assistance Memo 122</u>, <u>Electric Utility Clearance Requirements</u> for acceptable clearances. Changes to Seattle City Light's system to meet appropriate clearances will be performed at the customer's expense. The cost must be paid in advance of any work.

Installation of Facilities for Other Utilities:

The specifications referenced by this letter do not include facilities for other utilities serving this project. However, for Seattle City Light installation of conduits and small handholes for other utilities in the public right-of-way, the customer must:

• Obtain written installation specifications from each franchised utility requesting installation of facilities by Seattle City Light.



- Forward these specifications to Seattle City Light at least two weeks before Seattle City Light is to begin underground construction in the right-of-way.
- Seattle City Light will review the specifications and the customer will be billed an estimated cost of the time & materials for Seattle City Light work required by the specifications.

Preventing Water from Entering the Building:

- Prevent water from entering customer's service equipment or building from transformer pad through customer's low-voltage service conduits or bus gutter, and conduit's/gutter's wall/floor/ceiling penetration.
- Install conduits and equipment at elevations that will prevent water from entering building.

Construction Materials Inspection:

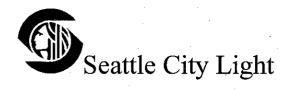
- Use Seattle City Light approved conduit manufacturers only. Refer to Seattle City Light Material Standard 7345.2 for a list of Seattle City Light approved conduit manufacturers. Note manufacturer limitations for PVC female adapters given on the material standard.
- Phone your electric service representative in advance of purchasing or installing construction materials for Seattle City Light approval of manufacturers.

Vault and Conduit Installation Inspection:

- Please contact your electric service representative 48 hours in advance of pouring pad and vault structures, and before backfilling trenches, to schedule a Seattle City Light inspector to observe construction and perform inspection.
- No inspection will be made unless shoring for excavation complies with WAC 296-155 Part N, Excavation, Trenching, and Shoring.
- The Seattle City Light inspector must inspect all aspects of enclosures and vaults, including, but not limited to, access, walls/floor/ceiling construction, conduit penetrations, grounding, and secondary bus bars before the enclosures and vaults will be approved for service.
- The Seattle City Light inspector must inspect and approve the conduit trench, trench bedding, conduits, mandrelling of conduits, and trench backfill before covering the trench.

Customer Metering & Primary Switchgear Requirements:

- The Customer shall follow Seattle City Light "Construction Standard 1562.05" for 27kV which can be provided to ensure customers, consultants and contractors acquire safe and reliable primary switchgear.
- In addition, the customer should refer to Seattle City Light Material Standard 6828.8 for the primary metering cabinet
- The EUSERC (Electric Utility Service Equipment Requirements) for Seattle City Light shall be used in all cases.
- The following EUSERC's should be utilized. EUSERC 400-Revenue Metering, 404 High Voltage Metering Enclosure, 407 Instrument Transformers, 408 Hinged Meter Panel, 414 Current Transformer.
- The Customer will provide the CT enclosure as described.



- The meter base shall be provided by the customer. Meter bases shall comply with the Seattle City Light Construction Guideline DU13-4 and appropriate EUSERC.
- Install metering equipment according to Seattle City Light's RESC manual, chapter 11.
- Supply a stainless steel meter ring for all meter sockets.
- Some commercial meters shall have 100% duty, manual-block-bypass sockets.
- The owner/developer must provide a list or riser diagram with all permanent unit numbers, and individual unit electric heating load if that applies, to enable initiation of the electrical connection order.
- If the electrical meters are to be located inside the building and the building or meter room is to be locked, Seattle City Light will provide and install a keybox on the building. It is the customer's responsibility to supply a key that will provide access into the building. The key will be stored in the keybox. The key must be given to the electric service representative before service will be approved for connection.
- Prior to approval of service and meter installation, all separately metered spaces and their meter sockets must be identified by final space or unit number, letter designation, and/or street address

Service Design:

Provide and install an electrical service that complies with Seattle City Light's <u>Requirements for Electric Service Connection (RESC)</u> manual and the current Seattle City Light rate ordinance.

Construction Responsibility:

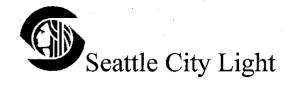
If the customer chooses to have a contractor install the service between the customer's service connection point and Seattle City Light's distribution system, Departmental Policy and Procedure (DPP) 500 P III-422 shall apply. Specifically in section 6.1.4, the customer shall be responsible for the costs of maintenance, replacement, and/or repair of any contractor-provided and installed equipment and material that requires maintenance or fails within five years after the service installation is energized by Seattle City Light. Seattle City Light may, at its discretion, maintain, replace, and/or repair contractor-provided and -installed equipment and material that requires maintenance or fails within this five-year period and bill the customer for time and material expenses incurred.

Project Lead-Time:

Schedules for completing installations may vary. Large projects may require extended lead-time (up to 18 months) to allow us to procure and prepare transformers, equipment, and materials. Any changes to the contract application terms must be made well before your estimated connection date if delays are to be avoided.

Construction Permit:

If you will be trenching in a public right-of-way, you must obtain a permit from the local permitting authority. For permit information, please contact the appropriate jurisdiction below:



• City of Burien

(206) 248-5520

http://www.burienwa.gov/commdvlpmnt/onlinepermit.htm

• City of Lake Forest Park

(206) 368-5440

http://www.cityoflfp.com/forms/documents/right-of-way_appl.pdf

• City of Normandy Park

(206) 248-7603

http://www.ci.normandy-park.wa.us/

• City of Renton

(425) 430-7299

http://rentonwa.gov/government/default.aspx?id=958

• City of Seatac

(206) 973-4730

http://www.ci.seatac.wa.us/services/rowpermit.htm

City of Seattle

(206) 684-5283

http://www.seattle.gov/transportation/stuse_permits.htm

• City of Shoreline

(206) 546-1811

http://www.cityofshoreline.com/cityhall/permits/index.cfm

• City of Tukwila

(206) 433-0179

http://www.ci.tukwila.wa.us/pubwks/pwpermlist.htm

• Unincorporated King County (206) 296-7456

http://www.metrokc.gov/psd/permit/page2.aspx

Motor Loads:

Meet the requirements outlined in Chapter 12 of the <u>RESC</u> manual describing Seattle City Light requirements for starting electric motors and other special loads. Electric motors with locked-rotor currents that exceed the maximum allowable motor starting-current limitations described in the RESC manual shall be installed with current-limiting motor starting devices.

Electromagnetic Interference:

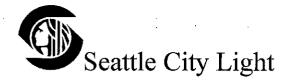
The building's service entrance equipment, including customer switchgear and Seattle City Light cables, may produce electromagnetic fields that may affect sensitive equipment such as computer monitors. It is the customer's responsibility to design and construct the building to avoid these effects.

Power Surges, Faults, Transients, and Outages:

Power surges, faults, electrical transients, planned and emergency power outages, other occurrences not within Seattle City Light's control, or mechanical failure may affect your electrical equipment, your electrical system, or the availability of electricity to your building. You may avoid such problems by providing at your expense protective devices or backup generation equipment for power outages. It is your responsibility to take the above steps as provided by city ordinance (SMC 21.49.110 (G) and (Q)).

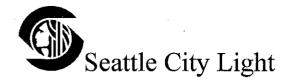
Notification of Added Load:

When additional load is added to your service, you must notify Seattle City Light per <u>SMC 21.49</u> (S) and <u>WAC 480.100.148 (1)</u>.



Civil Work Inspections:

Please contact your electric service representative 48 hours in advance of pouring pad and vault structures, and before backfilling trenches, to schedule a Seattle City Light inspector to observe construction and perform inspection. The Seattle City Light inspector must inspect and approve the conduit trench, trench bedding, conduits, mandrelling of conduits, and trench backfill before covering the trench. The Seattle City Light inspector must inspect all aspects of enclosures and vaults, including, but not limited to, access, walls/floor/ceiling construction, conduit penetrations, grounding, and secondary bus bars before the enclosures and vaults will be approved for service. No inspection will be made unless shoring for excavation complies with WAC 296-155 Part N, Excavation, Trenching, and Shoring.



Online References:

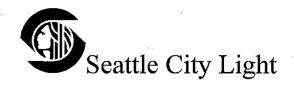
The following City of Seattle reference documents may be viewed on the Internet using Adobe Acrobat Reader software, available without charge at www.adobe.com.

- Seattle City Light New Construction Web Site: Customer resources for new construction are available at http://www.seattle.gov/light/newconstruction/
- Seattle City Light Construction Guidelines and Material Standards Online: Current Seattle City Light guidelines and standards are available at http://www.cityofseattle.net/light/engstd/
- Seattle City Light Requirements for Electric Service Connection Online: The entire RESC manual is available at http://www.ci.seattle.wa.us/light/contractors/resc/resc.pdf
- City of Seattle Standards Online: Seattle Public Utilities' standard plans and specifications can be accessed at http://www.seattle.gov/util/Engineering/Standard_Plans_& Specs/index.asp
- City Light Service Request Status: Please visit our Service Request Status application at http://web1.seattle.gov/light/rsrp/default.aspx.. This application will allow you to determine the current status of your project using the Service Request number (SR) found on the first page of this letter. Once you enter the SR number you will be able to see what phase of work your request is in.

Service Request Status:

Please visit our Service Request Status application at

<u>http://web1.seattle.gov/light/rsrp/default.aspx</u>. This application will allow you to determine the current status of your project using the Service Request number (SR) found on the first page of this letter. Once you enter the SR number you will be able to see what phase of work your request is in.



Attachment D: Customer Construction Requirements 26.4KV Primary Metered Service

Service Address:

United States General Service Administration (GSA)

Federal Center South, B1202 4735 E Marginal Way S. Seattle, WA. 98134

SR #: 58320, WO#19840

Re: Service Construction Letter Dated: March 17, 2011

The following is a summary of the customer construction requirements to support the Seattle City Light service installation.

SWITCHGEAR ENCLOSURE

Location:

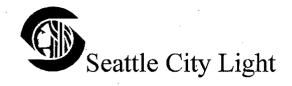
- Comply with Seattle City Light Construction Guideline U10-7.
- Enclosure's fence must be a minimum of:
 - 6 feet from any property line
 - 6 feet from noncombustible conductive (metal) structures
 - 3 feet from noncombustible nonconductive structures
 - 3 feet from combustible nonconductive structures that have a 3-hour fire rating.
- Pad must be a minimum of:
 - 10 feet from any property line between private properties.
 - 10 feet from building doors or windows.
 - 10 feet from combustible structures.
 - 6 feet from noncombustible conductive (metal) structures.
 - 3 feet from noncombustible nonconductive structures and combustible nonconductive structures that have a 3-hour fire protection rating.

Soundproofing:

Isolate transformer enclosure so that sound and vibration levels from transformers satisfy
applicable laws and ordinances of the State of Washington, King County, and the City of
Seattle.

Seattle City Light Access:

- Provide adequate Seattle City Light vehicular (truck) access to enclosure for installation and service of electrical equipment.
- Provide properly supported, unobstructed access from the right-of-way to the switchgear enclosure for Seattle City Light equipment-handling machinery. Seattle City Light must be able to move into the switchgear enclosure, or remove from the switchgear enclosure, all electrical equipment, using Seattle City Light equipment-handling machinery.



Switchgear Enclosure:

- Construct according to Construction Guidelines U10-1.2.
- Provide and install one fenced switchgear enclosure on the attached Construction Requirements drawing.
- Provide and install one concrete pad on the attached Construction Requirements drawing.
- Foundations, footings, structures, tanks, piping etc. are not allowed under the pad, the enclosure, or the enclosure's grounding grid.

Grounding:

- Install four 5/8" x 8' copperclad steel ground rods driven into compacted soil inside the enclosure per Construction Guideline U10-1.2.
- Install four 5/8" x 8' coppercial steel ground rods driven into compacted soil outside the enclosure per the attached Construction Requirements Drawing. Tie the exterior grid to the interior grid as shown on the drawing.
- Install #4/0 AWG bare copper ground mat per Construction Guideline U10-1.2. All conductive parts of the enclosure's fence shall be tied to the pad's ground grid. The fence gate shall be grounded to the fence post with a flexible braided copper strap.
- The Seattle City Light inspector must inspect and test exothermic welds before completing grounding installation.
- After grounding installation is complete, the Seattle City Light electrical reviewer must test and approve grounding before vault will be accepted for service.

PRIMARY (High Voltage) DEADBREAK JUNCTION VAULT

Vault Access:

- Provide permanent Seattle City Light vehicular (truck) access to vault for installation and service of electrical equipment.
- Provide a permanent, level, unobstructed, 6-feet-wide working area around vault.

Precast Vault:

• Provide and install one 712-LA junction vault with one 712-TL-39 top section with one 5106-AT-3-332P slip-resistant cover slab (from Utility Vault Co, or other Seattle City Light-approved manufacturer), per Construction Guideline U2-15.1 and on the drawing as V-614.

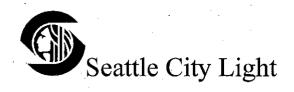
Ground Rods:

- Install two 5/8" x 8' copper-clad steel rods driven in opposite corners per Construction Guidelines U2-15.1, U10-7 and Material Standard 5642.1.
- The Seattle City Light electrical reviewer must test and approve grounding installation before vault will be accepted for service.

PRIMARY (High Voltage) CONDUIT

Conduits:

- Install primary conduits according to Construction Guidelines U12-1.4.
- Conduits must have 36-inch minimum cover on private property.



- Intercept and extend existing two 5-inch PVC Schedule 40 conduits from the power pole#182 to the junction vault and install two 5-inch PVC SCH 40 conduits from the junction vault to the meter compartment in the customer's switchgear per Construction Guideline U12-1.4 and the V-614, Pad-615 details.
- Intercept and extend existing two 5-inch PVC Schedule 40 conduits from the existing Pad-611 to the junction vault per Construction Guideline U12-1.4 and the V-614 detail.
- A maximum of three 90 degrees of bends, of 5-feet radius, is allowed in primary conduit run from pole#182 to the V-614, from the V-614 to the meter compartment and from the V-614 to the Pad-611, including bend at base of pole and the bend beneath the pad.
- All bends shall be rigid galvanized steel (Material Standard 7050.05).
- Conduits shall enter vault perpendicular to wall.
- Conduits shall enter vault no more than 18 inches horizontally from a corner.

CAUTION: Energized high-voltage underground cables exist in one of existing two 5-inch conduits. Coordinate with Seattle City Light crew to intercept and extend existing two 5-inch conduits into V-614. Before beginning work you must phone your electric service representative to schedule a safety stand-by.

End Bells:

- Furnish and install end bells flush with interior walls on all conduits entering vault.
- Conduits shall be grouted both inside and outside of vault, according to Construction Guideline U2-11 (page 3 of 5, note 7, and page 4 of 5).

Cleaning and Inspection:

- Clean and mandrel conduits, and install a pulling handline and a marking tape according to Construction Guideline U2-11.40.
- The Seattle City Light inspector must inspect conduit trench, trench bedding, conduits, mandrelling conduits and trench backfill before covering trench.

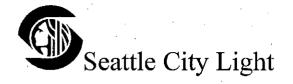
CUSTOMER SWITCHGEAR

- Provide and install switchgear with the metering compartment per Construction Standard 1562.05 and the attached Construction Requirements Drawing.
- Submit to and have approved by SCL prior to releasing metering compartment design, including cable clearances to all barriers, insulators, etc, to the switchgear manufacturer for construction.

Service Communication Conduit:

• Install two 2" PVC SCH 40 conduits from the meter compartment in the switchgear to the customer phone line room for the meter reading as shown on the attached Construction Requirements Drawing.

Attached: Construction Requirements Drawing showing Site Plan & Vault & Transformer Enclosure Detail.



Please reference:

Seattle City Light Construction Guidelines: U2-10

U2-11

U2-11.40

U2-15.1

U10-1.2

U10-7

U12-1.4

Seattle City Construction Standard: 1562.05

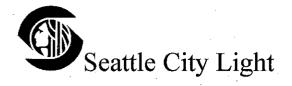
Seattle City Light Material Standards: 5642.10

6103.90

7015.05

7050.05

EUSERC Drawings: 401, 404, 407, 408, 414



400 kcmil

500 kemil

600 kemil

700 kcmil

750 kcmil

800 kcmil

Table 9232-2 Acceptable Service Entrance Cable Sizes

Copper

no

OK

OK

no

OK

no

Concentric Round Stranded & Concentric Round Compressed Compact Stranded Stranded Stranded OK OK #2 AWG no #1 AWG no OK OK 1/0 AWG OK OK OK 2/0 AWG OK OK OK 3/0 AWG OK OK OK 4/0 AWG OK OK OK 250 kcmil OK OK OK 300 kcmil OK. OK OK 350 kcmil OK OK OK

Aluminum

OK

Attachment E: Service Construction Acceptance Form

Service Address: United States General Services Administration (GSA)
Federal Center South B1202
4735 E. Marginal Way S
Seattle, WA.

SR #: 58320, WO# 19840

Re: Service Construction Letter Dated: March 17th, 2011

By returning this Service Construction Acceptance Form signed and dated, the customer agrees with all the terms and conditions of the Service Letter dated March 17th, 2011 including its attachments, the <u>Seattle City Light Cost Estimate</u>, the <u>Seattle City Light Scope of Work</u>, <u>General Customer Requirements</u>, and <u>Customer Construction Requirements</u>, including the <u>Construction Requirements</u> Drawing.

NOTE: Should you desire to make changes after this agreement has been executed, a 06.61 Service Request Change Order and revised project plans may be required and additional Seattle City Light charges may be incurred. Please contact Seattle City Light for additional details.

Print Name:		Title:
Signature:	(Owner/Authorized Representative)	Date:
Contact Phone: _		

Payment of 20% of the cost estimate listed in Attachment "A", is required at this time. Please return this signed form with the 20% payment as soon as possible. If not received within 45 days your project will be placed as inactive.

Mail to:

Seattle City Light Attn: SCL Intake Desk 1300 N 97th St Seattle, WA 98103-3320 or

Seattle City Light Attn: Ken Houlder P.O. Box 34023 Seattle, WA 98124-4023